



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLN. OF: WITHERS et al.  
SERIAL NO.: 10/828,641  
FILED: April 21, 2004  
FOR: THERMAL AND ELECTROCHEMICAL PROCESS FOR METAL...  
GROUP: 1742 Confirmation No. 5332  
DOCKET: MER 03.01  
  
MAIL STOP AMENDMENT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

## **SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

Dear Sir:

In connection with the above-entitled matter, Applicants hereby proffer U.S. Patent Office Form PTO-1449, including copies of the non-U.S. Patent references listed therein. Applicants are not submitting copies of the U.S. Patents as the Office waived the requirement. The claims in the present application are believed to be patentably distinguished over these references.

This information disclosure statement is being made pursuant to the duty of disclosure imposed by law and formulated in 37 CFR 1.56(A). No representation is made that the information thus disclosed in fact constitutes prior art or that it is the closest prior art, inasmuch as 37 CFR 1.56(A) relies on a materiality concept which is not subject to disclosure.

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ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /JR/

Form PTO-2038 authorizing credit card payment in the amount of \$180.00 to cover the fee under 37 CFR 1.97(d) is enclosed. In the event there are any fee deficiencies or additional fees are payable, please credit them, or credit any overpayment, to our Deposit Account No. 08-1391.

Respectfully submitted,



Norman P. Soloway  
Attorney for Applicants  
Reg. No. 24,315

#### CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: MAIL STOP AMENDMENT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on March 21, 2007 at Tucson, Arizona.

By 

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## U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	4,342,637	08.03.1982	Withers et al.	204	282	
	4,409,083	10.11.1983	Upperman et al.	204	245	
	2,302,604	11.17.1942	Dolbear			
	2,722,509	11.01.1955	Wainer et al.	204	64	
	2,707,168	04.26.1955	Wainer et al.			

## U.S. PATENT APPLICATION PUBLICATIONS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

## FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
	GB 452269	07.03.1936	Great Britain	C25C	7/02		
	GB 825872	23.12.1959	Great Britain				
	CA 626,363	08.29.1961	Canada				

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		Hashimoto, "Sintered Titanium Carbide as the Soluble Anode for Fused-Salt Electrolysis", Dep. Mater. Sci., Himeji Inst. Technol., Himeji, Japan, Journal written in Japanese, 1971, pps. 487-493, Abstract only.
		Hasimoto, "Extraction of titanium from soluble anodes of arc-reduced titanium-carbon-oxygen and titanium carbide", Dep. Mater. Sci., Himeji Inst. Technol., Journal written in Japanese, 1971, pps. 282-288, Abstract only.

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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

## INFORMATION DISCLOSURE CITATION

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## U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
		2,681,847	06.22.1954	Wainer et al.	23	202	
		2,681,848	06.22.1954	Wainer et al.	23	202	
		2,698,221	12.28.1954	Wainer et al.	23	202	
		2,743,166	04.24.1956	Wainer et al.	23	202	
		2,681,849	06.22.1954	Sibert et al.	23	202	

## U.S. PATENT APPLICATION PUBLICATIONS

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		Hashimoto, "Anodic extraction of titanium from low-grade (δ) - titanium-carbon-oxygen alloy by fused-salt electrolysis", Dep. MaterSci. Himeji Inst. Technol., Himeji, Japan, Journal written in Japanese, 1971, pps. 480-486, Abstract only.
		Hashimoto, "Electrodeposition of pure titanium metal by double-stage fused-salt electrolysis", Dep. Mater. Sci. Himeji Inst. Technol., Himeji, Japan, Journal written in Japanese, 1968, pps. 108-119, Abstract only.

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		2,750,259	06.12.1956	Steinberg et al.	23	202	
		2,733,133	01.31.1956	Cave et al.	23	202	
		2,848,303	08.19.1958	Copper	23	202	
		3,047,477	07.31.1962	Spraul et al.			
		3,078,149	02.19.1963	Barber	23	202	

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## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

Hashimoto, "Electrowinning of titanium from its oxides. III. Electrowinning of titanium from titanium dioxide or calcium titanate in calcium fluoride-magnesium fluoride molten bath salts", Dep. Mater. Sci., Himeji Inst. Technol., Himeji, Japan, 1972, pps. 39-44, Journal written in Japanese, Abstract only.

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		4,668,501	05.26.1987	Shibuta et al.	423	608	
		2,792,310	05.14.1957	Steinberg et al.	106	43	
		2,880,149	03.31.1959	Carlton et al.	204	64	
		2,868,703	01.13.1959	Wainer			
		2,904,426	09.15.1959	Wainer	75	10	

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		2,833,704	05.06.1958	Wainer	204	64	
		2,798,844	07.09.1957	Freedman	204	64	
		2,828,251	03.25.1958	Sibert et al.	204	39	
		3,098,805	07.23.1963	Ervin et al.			

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